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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,317	04/21/2004	Wen-Kuen Chen	E0523-00059	5674
8933	7590	10/24/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			DINH, TRINH VO	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/829,317

Applicant(s)

CHEN ET AL.

Examiner

Trinh Vo Dinh

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 09/01/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,14 and 16 is/are rejected.
- 7) ☒ Claim(s) 3,12,13 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's communication filed on 09/01/2005 has been carefully considered by the examiner. In view of a further search, a new rejection is set forth below. This action is not made final.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-5 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Komatsu et al (US 6,791,260).

Respecting claims 1, 4 and 5, Komatsu discloses organic light-emitting diode structures (Fig. 2) forming an array, each of the organic diode structures comprising first and second anodes (107, 118 in Fig. 10), first and second organic light emitting layers (103) disposed between the first and second anodes, and a first electrode (108) disposed between the first and second organic light-emitting layers (103), and an insulating layer (109 or 119) disposed between the first and second electrodes (107, 118).

Respecting claim 2 and 11, Komatsu discloses light being emitted from at least one of the first and second organic light-layers (103) when an electric current is passed between one of the first and the second anodes and the first electrode

#### *Claim Rejections - 35 USC § 103*

Art Unit: 2821

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu in view of Wang (US 6,043,478).

Respecting claim 6, Komatsu discloses every feature of the claimed invention except transistors. Wang discloses a first transistor (M1) coupled to each of the organic light-emitting diode structures (Fig. 4), and a second transistor (M2) coupled to each of the organic light-emitting diode structures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Komatsu's display with transistors as taught by Wang in order to drive pixels of organic structures.

Respecting claims 7-10, Wang discloses, in Fig. 4, the first transistor (S1) being coupled to one of the first and the second anodes of the organic light-emitting diode structures while the second transistor (M2) being coupled to the other one of the first and the second anodes of the organic light-emitting diode structures. Wang further discloses a third transistor (M4, M3) coupled to the first and the second transistors (S1, S2), the first and the second transistors drive the organic light-emitting diode structures, and the third switch (M3, M4) switching the first and second transistors (M1, M2).

5. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontogeorgakis et al (US 6,822,611 B1) in view of Komatsu et al (US 6,791,260).

Art Unit: 2821

Respecting claim 14, Kontogeorgakis discloses, in Fig. 4, a telecommunication device comprising a main body (12), a flip-up door (14), and a display (16) beneath the flip-up door. However, Kontogeorgakis does not suggest the display comprising diode structures which each structure including anodes, organic light-emitting layers and an electrode. Komatsu discloses the display comprising organic light-emitting diode structures (Fig. 2) forming an array, each of the organic diode structures comprising first and second anodes (107, 118 in Fig. 10), first and second organic light emitting layers (103) disposed between the first and second anodes, and a first electrode (108) disposed between the first and second organic light-emitting layers (103). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ Komatsu's structure to communication device of Kontogeorgakis. Doing so would reduce display size to reduce an emission area (Komatsu: col. 3, lines 3-5).

Respecting claim 16, Komatsu discloses the structure comprising an insulating layer (109 or 119) disposed between the first and second electrodes (107, 118).

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontogeorgakis as modified by Komatsu, and further in view of Wang (US 6,043,478).

Respecting claim 17, Kontogeorgakis as modified by Komatsu discloses every feature of the claimed invention except transistors. Wang discloses a first transistor (M1) coupled to each of the organic light-emitting diode structures (Fig. 4), and a second transistor (M2) coupled to each of the organic light-emitting diode structures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Komatsu's display with transistors as taught by Wang in order to drive pixels of organic structures.

Art Unit: 2821

Respecting claim 18, Wang further discloses a third transistor (M4, M3) coupled to the first and the second transistors (S1, S2),

*Allowable Subject Matter*

7. Claims 3, 12-13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited art of record fails to teach the organic light emitting diode structure comprising a second electrode disposed between the first and the second organic light-emitting layers.

*Inquiry*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (571) 272-1821. The examiner can normally be reached on Monday to Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

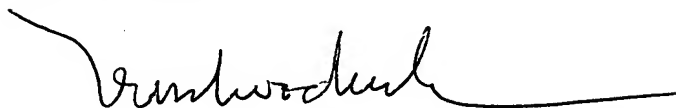
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Art unit 2821*

Application/Control Number: 10/829,317

Page 6

Art Unit: 2821

A handwritten signature in black ink, appearing to read 'Trinh Vo Dinh', followed by a long horizontal line extending to the right.

*Trinh Vo Dinh*

*October 20, 2005*